HONDA ServiceNews April 2006

Helping you fix it right the *first* time - *every* time

Diagnosing DTC P1457? Use TID Info to Pinpoint Problem

NOTE: This article applies to all Honda models with OBD **other than** '03–06 Accords, '04–06 Civics, '04–06 CR-Vs, '03–06 Elements, '05–06 Odysseys, '05–06 Pilots, '06 Ridgelines, and '04–06 S2000s. These newer models no longer use DTC P1456 or P1457. For details on this, see "Seven New DTCs Replace DTCs P1456 and P1457" in the January '06 issue of *ServiceNews*.

Troubleshooting DTC P1457 [EVAP system leakage (EVAP canister system)] and need to narrow it down to a specific problem? The OBD self-test info pulled from the ECM/PCM can help make short work of it (see S/B 02-007, *EVAP System Function Testing and Diagnostics With the PGM Tester*). It shows you which of the recently run OBD self-tests passed or failed.

NOTE: This S/B has you pulling test info with the PGM Tester, but doing it with the HDS is very similar. Until we can update this S/B to cover the HDS, just consider it useful guidance for now.

Here are the OBD self-tests related to DTC P1457 listed by their test ID (TID), along with an explanation of what could cause each test to fail:

- **TID$2D:** This test fails because of a large leak, a solenoid that won't work, or a loose connection that keeps a solenoid from working.
- **TID$2E:** This test fails because of a small leak. In most cases, it isn't because of an electrical problem but rather a component that won't hold vacuum during the test. Another reason is crossed hoses at the two-way valve.
- **TID$2F:** This test fails because of a restriction in the EVAP canister vent. A canister vent shut valve that's stuck closed could be the reason, but a more likely reason is a yellow sac spider's nest in the three-way valve or drain joint. For details on this, see "Got DTC P2422? Check for an EVAP System Vent Blockage" in the March '06 issue of *ServiceNews*.
- **TID$29:** This test fails because the purge control solenoid valve is stuck open or a short to ground in the control wire is causing the system to purge when it shouldn't. On rare occasions, a restricted EVAP canister vent can cause this test to fail.
- **TID$3E:** This test fails because of a very small leak. Like TID$2E, this test usually fails because of a component that won't hold vacuum and not because of an electrical problem.

Honda Music Link Won't Work After Installation

NOTE: This article applies to '06 Accords, '06 Civics, '06 CR-Vs, '06 Odysseys, and '06 S2000s.

Just installed Honda Music Link but can't get it to work? Try unplugging the Honda Music Link harness and the bus cable from the Honda Music Link unit, and checking for broken or bent pins. If the pins look OK, swap out the harness first, and then the bus cable to isolate the problem.

When unplugging the harness or the bus cable from the unit, **always** pull back on the rectangular outer sleeve to release its locking mechanism. **Never** pull on the harness, the cable, or the strain relief.

Unplugging iPod From the Honda Music Link Harness

NOTE: This article applies to '06 Accords, '06 Civics, '06 CR-Vs, '06 Odysseys, and '06 S2000s.

To unplug an iPod from the Honda Music Link harness, just squeeze both release buttons on the sides of the connector, and give it a gentle pull. **Never** yank on the connector, the strain relief, or the harness.

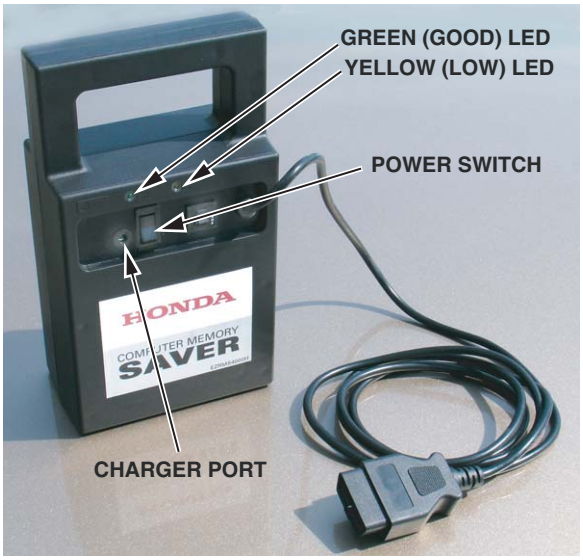
Using the Honda Computer Memory Saver

The Honda Computer Memory Saver is a real time saver that helps make short work of replacing a battery. Since it works as a secondary 12-volt source, it saves you the hassle of writing down your service customer's audio presets, resetting the clock, or even doing the idle learn procedure.

The instructions molded on the back of the tool are out-of-date; ignore them. To ensure you're using this tool properly, follow these steps instead:

NOTE: Make sure you do step 1 with the tool disconnected from the vehicle. You're checking just the tool's internal battery charge here.

1. Press the power switch on the front of the tool to **On**. Look at the LEDs above the switch.



- If you see the **green** (**Good**) LED lit, the tool's internal battery has enough charge. Press the power switch to off. Go to step 2.
- If you see the **yellow** (**Low**) LED lit, the tool's internal battery needs charging. Press the power switch to off, then plug the 110V charge adapter into the **Charger** port on the front of the tool. As the battery charges, you'll see either a **red** LED lit on the front of the tool or, on later tools, a **red** LED lit on the charge adapter itself. Once the battery is fully charged, unplug the charge adapter. Make sure the green LED lights with the power switch.

2. With the power switch off, connect the tool to the vehicle's 16P DLC. You're now testing the circuit continuity and available power between the vehicle's battery and the tool's internal battery. Look at the LEDs above the switch.
   - If you see the **green** LED lit, press the power switch to **On**. You've now got the "green light" to replace the vehicle's battery.
   - If you see the **yellow** LED lit, the vehicle's battery is low on charge.
   - If you don't see either LED lit, there's an open circuit between the vehicle's battery and the tool's internal battery. Check the circuit breaker on the front of the tool, and check all the connections as well. If everything is OK, then you're dealing with a power loss at the 16P DLC connector. You'll need to fix that problem before you can replace the vehicle's battery.

The Honda Computer Memory Saver is available through the American Honda Tool and Equipment Program. To get one, just call **888-424-6857** and order EZRMS4000H.

Replacement Rear Diff Wire Subharnesses Now in Stock

Until recently, if you needed to replace a faulty rear diff wire harness in a '03–06 Pilot or '06 Ridgeline, you had to replace the whole rear diff. (Talk about throwing out the baby with the bath water!)

Good news! American Honda parts stock now carries individual replacement rear diff wire subharnesses. Here's the ordering info:

Pilot

- **Right Rear Differential Cable Assembly:** P/N 48320-PGJ-020, H/C 8360521
- **Left Rear Differential Cable Assembly:** P/N 48330-PGJ-000, H/C 8360539

Ridgeline

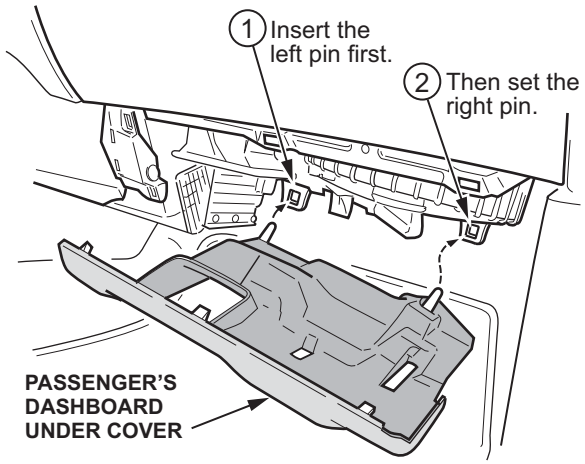
- **Right Rear Differential Cable Assembly:** P/N 48320-RJG-000, H/C 8360547
- **Left Rear Differential Cable Assembly:** P/N 48330-RJG-000, H/C 8360554

Reinstalling the Passenger's Dashboard Under Cover in a '06 Civic

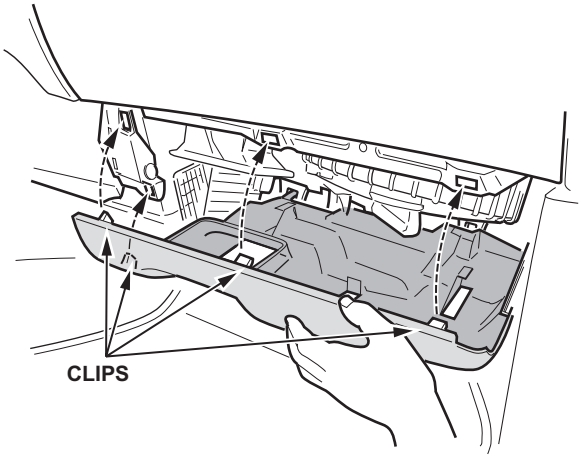
The removal/installation procedure for the passenger's dashboard under cover on page 20–146 of the '06 Civic S/M is a tad fuzzy on details when it comes to reinstalling the cover. Reinstalling "in the reverse order of removal" works fine, but if you don't do it just right, you could cause gaps and rattles and wind up with a possible comeback.

Here's what you need to do to ensure you're always doing it right the first time:

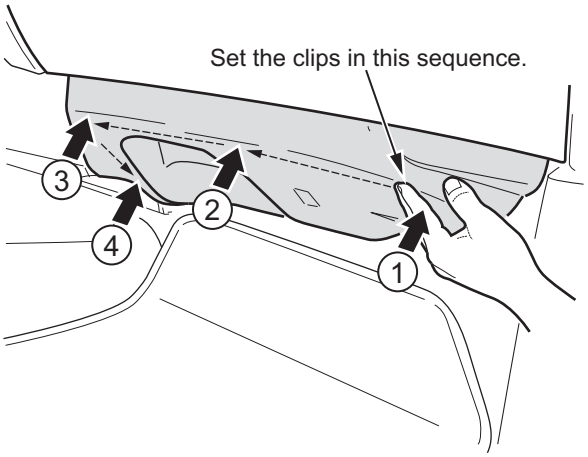
1. Check for any clips that are damaged or stress-whitened. Replace those clips with new ones.
2. Line up the **left** pin on the bottom of the cover with its holder under the dashboard. Push the pin all the way in so it's fully set.



3. Repeat step 1 for the **right** pin on the bottom of the cover.
4. Line up the four clips on the cover with their matching holes under the dashboard.



5. Working from right to left, push the clips into the holes in the sequence shown.



6. Grab the right side of the cover, and give it a tug to make sure it's firmly in place. (You need to do this just in case the glove box bracket is bent and the clips aren't fully set.)
7. Push the bottom of the cover at the center console to make sure the cover is fully set and there aren't any gaps.

Hanging Air Fresheners: Bad News for Paint or Plastic

Seems everywhere you look these days you see those cardboard air fresheners hanging from rearview mirrors or dashboards. Sure, they make your car's or truck's interior smell showroom fresh or like a mountain meadow after a spring rain, but they've got their dark side, too. The chemicals used in these things just love to eat into any paint or plastic they come in contact with.

Most air freshener brands actually state right on their packages to avoid contact with any surface. Vehicle owners need to take those words seriously when using them. If any interior paint or plastic gets damaged because of it, it's a customer-pay repair. Such damage **isn't** covered by warranty.

Warranty Audio Order: Frequently Asked Questions

NOTE: This article applies to '03–06 Accords, '03–06 Civics, '03–06 CR-Vs, '03–06 Insights, '03–06 Odysseys, '03–06 Pilots, and '03–06 S2000s.

The Warranty Audio Order system has been up and running for a while and, during that time, we've gotten several inquiring calls about it. Here are the answers to some of the questions we've been asked:

Question: *Why do I have to answer so many questions to order an audio, RES, or navigation system component?*

Answer: There are several reasons for all these questions. One was to cut down on the number of parts that check out No Trouble Found (NTF) after reman center inspection. Before the system was put into place, **34 percent** of returned audio units checked out NTF. Another reason was to root out units that were customer-damaged. Before the system was launched, **32 percent** of the audio units returned were due to customer damage and therefore not warrantable. Much of this damage came from lodged objects or using recordable CDs or DVDs with adhesive labels or protective disc covers. For details on this, see "Adhesive Labels or Protective Disc Covers on CDs or DVDs: A *Big* Taboo" in the October '05 issue of *ServiceNews*. Finally, the Core Return form was often submitted incomplete or it didn't accurately describe the customer's complaint. This made it hard for vendors to test for and repair a specific problem.

Question: *Why do service techs need to enter the Warranty Audio Order form?*

Answer: Service techs need to complete the appropriate system worksheet while they're troubleshooting the problem (see S/B 06-001, *Audio, Navigation, and RES Unit In-Warranty Exchange, and Audio and DVD Player Out-of-Warranty Repair*). The Warranty Audio Order form must also include the name of the service tech who did the troubleshooting so the RPO Tech Line has a contact just in case they need more info. The order form itself can be entered into the *i*N by either the parts manager, the service manager, or the service tech.

Question: *Who uses the info collected by the Warranty Audio Order system?*

Answer: This info gets used by the factories, Honda R&D, and the audio vendors to identify trends so they can improve the product and cut down on the number of warranty failures.

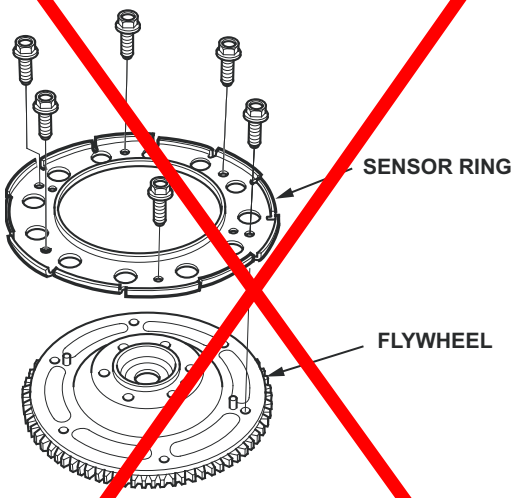
Question: *What do I charge my troubleshooting time to and how much time do I get?*

Answer: Use labor op number 011500, stereo sound system - diagnose sound quality, inoperative speakers or power feed. For audio units built into the center module, you get **0.6 hour**. For audio units that aren't built into the center module, you get **0.3 hour**.

~~*Always* Transfer Sensor Ring When Replacing Flywheel~~ Removed 4-14-08

EDITOR'S NOTE: This article has been replaced by "Replacing Flywheel? Transfer Sensor Ring and Torque to Spec" in the April '08 issue of *ServiceNews*.

~~Replacing the flywheel in a M/T-equipped '00–06 Insight or '03–05 Civic Hybrid? Make sure you transfer the sensor ring from the old flywheel to its replacement. *Replacement flywheels don't come with sensor rings.*~~



~~If you install the replacement flywheel without a sensor ring, you'll wind up causing an IMA system failure, setting an IMA DTC P1440 (IMA system problem). The IMA system uses the sensor ring to monitor the rotor position and calculate the motor speed. If the sensor ring is missing, you won't see motor speed in the IMA data list with the engine running.~~

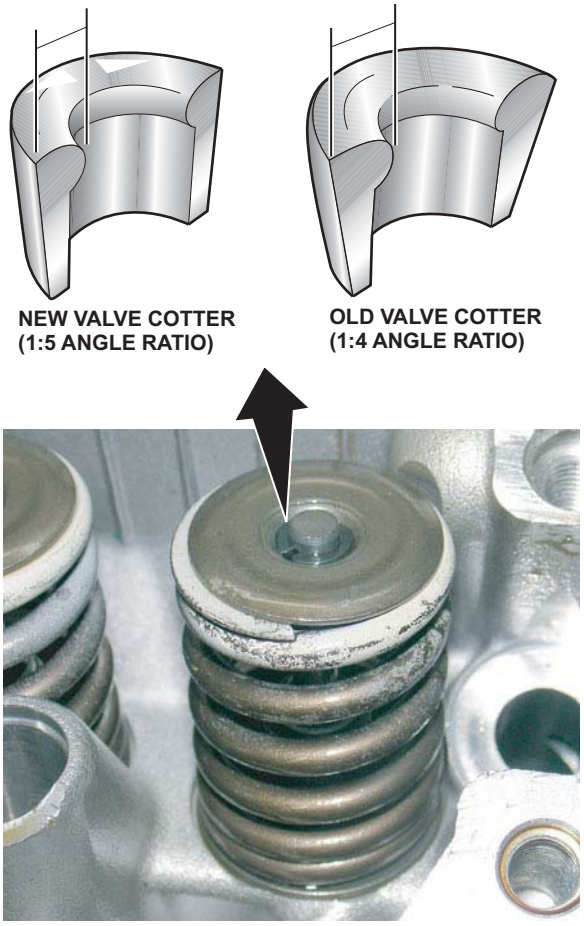
New Software for HDS: Version 2.004.004

During the week of April 10, 2006, all Honda dealerships were sent a new CD containing HDS software version 2.004.004. This new CD sports a gray label that reads "Honda Diagnostic System Installation Disk (VER 2.004.004), April 2006." Your system administrator should have this software already loaded onto the master server.

In a nutshell, software version 2.004.004 adds system coverage for the '07 Fit.

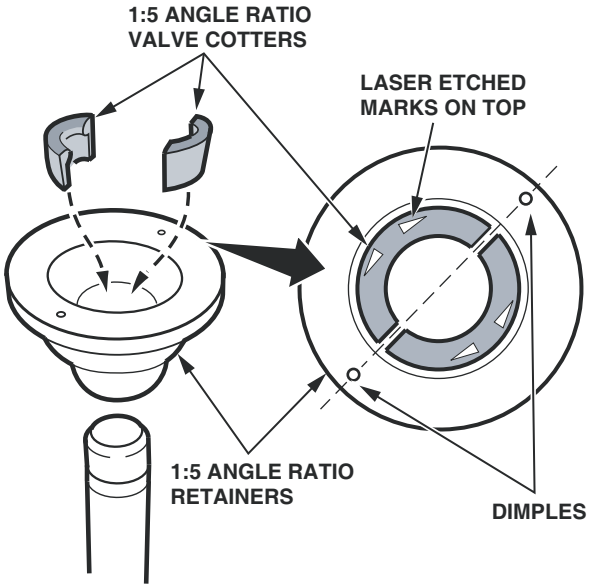
New Intake and Exhaust Valve Cotters and Valve Spring Retainers

Starting with '04 model year vehicles, our factories have been switching over to different intake and exhaust valve cotters and valve spring retainers. The new valve cotters and retainers have a **1:5 angle ratio** instead of a **1:4 angle ratio**. This ratio change increases the binding force between the two valve cotters, the retainer, and the valve.



It's important you don't mix these two types of valve cotters and retainers; **they're not interchangeable**. If you mix them up, you could wind up with a dropped valve, a thrashed engine, and one very unhappy service customer.

The two types of valve cotters and retainers look a lot alike at first glance, but there are a couple of subtle differences if you look really close. The replacement 1:5 angle ratio valve cotters have two laser-etched marks on top. The replacement 1:5 angle ratio retainer has two dimples 180° apart on the outside edge.



Your best bet to ensure you're ordering the right parts is to always check the parts catalog for the appropriate part application. It includes appropriate engine numbers so you can't go wrong.

Engine Won't Start, DTC P0685 Set? Check G101

Got a '06 Civic in your shop with an engine that cranks but won't start, or it's got DTC P0685 (ECM/PCM power control circuit internal circuit malfunction) set? Check ground G101, and make sure it's clean and tight. If G101 is cross-threaded, the bolt will be tight but the ground itself will have lots of wiggle room.

In DX, LX, and EX models, G101 is mounted to the water outlet cover (see photo 29 of the ETM). In Si models, it's mounted to the intake manifold (see photo 21).

Remember to Enter Your Name on the A/T Order Form

At the risk of sounding like the proverbial broken record, we just can't emphasize enough how important it is you test-drive the vehicle and enter your name in the **Customer's Complaint** field of the Warranty A/T Order form. Seems some Honda dealerships still aren't doing this.

The test-drive lets you check out your customer's complaint so you can be sure A/T replacement is really needed. Entering your name on the Warranty A/T Order form assures the factories and reman centers that a qualified Honda service tech was assigned to the job and did the actual troubleshooting. It also gives the folks in the Remanufactured Parts Dealer Service Group someone to talk to just in case they need more info.

To drive home this point, we've included some words about doing this in the recently revised S/B 98-061, *Automatic Transmission In-Warranty Exchange Program*.

PGM Tester Reads DTC P9999 or B1999

NOTE: This article is for you die-hard service techs who are still using the PGM Tester. Although American Honda no longer supports this tool, we thought we'd pass this info along to you anyway.

If the PGM Tester tries to read a code that's not defined in its software, you'll see DTC P9999 or B1999 on the display screen. To fix this problem, guess what? You've got to connect the HDS and clear the code! Oh well, just another reason to give the PGM Tester a well-earned rest and make the HDS your troubleshooting buddy.

New Remote Transmitter *Won't* Open the Trunk

Here's something you need to be aware of: The remote transmitter for '98–99 Accords (P/N 72147-S84-A01, H/C 5441910) has been discontinued and is no longer available from American Honda parts stock. It's been superseded to the remote transmitter used in '00–01 Accords (P/N 72147-S84-A03, H/C 6249049). Although this remote transmitter replacement works the doors in a '98–99 Accord just fine, it **won't** open the trunk.

Tips From Training: HDS Works on Early OBD Hondas

The HDS is American Honda's diagnostic tool for cars and trucks with OBD II. But, did you know it also works great on Hondas with earlier OBD versions?

The HDS comes with a 3-pin adapter that lets it communicate with these vehicles:

- '94–95 Accord L4
- '92–95 Civic
- '95 Odyssey
- '94–95 Prelude

With this adapter, you can access PGM-FI info and, if applicable, A/T and ABS info. If you need to replace it or you just want to have an extra one handy, call the American Honda Tool and Equipment Program at **888-424-6857** and order P/N 3557-1022-00.

One word of caution, though: Some cars or trucks may not supply power to the HDS. So make sure the HDS is freshly charged, or keep an external power source within easy reach.

This tip came to us from **Erik Bjorn** and the Electrical Curriculum Action Resource Team in Alpharetta, GA. Thanks, guys.

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